

Form PTO-1449
(Rev. 2-88)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOC. NO.

SERIAL NO.

960296.95491

09/114,973

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANT(SI): Dove and Shedlovsky

FILING DATE: 7/14/98

GROUP

1633
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U.S. PATENT DOCUMENTS

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					YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

✓	Antoch, Marina P. et al., "Functional Identification of the Mouse Circadian Clock Gene by Transgenic BAC Rescue," <i>Cell</i> 89:655-667 (1997)
✓	Balling, Rudi, "ENU-Mouse Mutagenesis Screen," (Application for Support of a Research Center)
✓	Bateman, Nigel, "Sombre, A Viable Dominant Mutant in the House Mouse," <i>The Journal of Heredity</i> 186-189
✓	Bazin et al., "Genetic studies of phenotypic revertants of the vestigial mutant in <i>Drosophila melanogaster</i> , induced by bromouridine and ethyl methanesulfonate," <i>Mutation Research</i> 105:65-72 (1982)
✓	Brown et al., "Mouse mutagenesis-systematic studies of mammalian gene function," <i>Human Molecular Genetics</i> 7:1627-1633 (1998)
✓	Brunialti et al., "The Mouse Mutation Sarcosinemia (<i>san</i>) Maps to Chromosome 2 in a Region Homologous to Human 9q33-q34," <i>Genomics</i> 36:182-184 (1996)
	Church et al., "Isolation of genes from complex sources of mammalian gene using exon amplification," <i>Nat. Genet.</i> 6:98-105 (1994) abstract
✓	Cobb et al., "Biochemical and molecular analysis of spontaneous and induced mutations at the mouse <i>Mod-1</i> locus," <i>Mutation Research</i> 234:1-7 (1990)
✓	Collaborative Study Group for the Micronucleus Test, "Strain difference in the micronucleus test," <i>Mutation Research</i> 204:307-316 (1988)
✓	Collaborative Study Group for the Micronucleus Test, "Single Versus multiple dosing in the micronucleus test: the summary of the fourth collaborative study by CSGMT/JEMS.MMS," <i>Mutation Research</i> 234:205-222 (1990)
	Cormier, et al., "Secretory phospholipase Pla2g2a confers resistance to intestinal tumorigenesis," <i>Nature Genetics</i> 17:88-91 (1997)
	De Stasio, et al., "Characterization of Revertants of <i>unc-93(e1500)</i> in <i>Caenorhabditis elegans</i> Induced by <i>N</i> -ethyl- <i>N</i> -nitrosourea," <i>Genetics</i> 147:597-608 (1997)
✓	Dickie, Margaret M., "Mutations at the Agouti Locus in the Mouse," <i>The Journal of Heredity</i> , 20-25
✓	Dickie, Margaret M., "A New Viable Yellow Mutation in the House Mouse," <i>The Journal of Heredity</i> 84-86
✓	Dove, William F., "Anecdotal, Historical and Critical Commentaries on Genetics, The Gene, the Polygene, and the Genome" <i>Genetics</i> 134:999-1002 (1993)
✓	Dove, William F., "Anecdotal, Historical and Critical Commentaries on Genetics, Transparent Vertebrates and Their Genetic Images" <i>Genetics</i> 137:339-341 (1994)
✓	Ehling et al., "Induction of specific-locus mutations in female mice by 1-3thyl-1-nitrosourea and procarbazine," <i>Mutation Research</i> 202:139-146 (1988)
✓	Ehling, U.H., "Germ-cell mutations in mice: Standards for protecting the human genome," <i>Mutation Research</i> 213:43-53 (1989)

EXAMINER

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pk	✓	Fahrig, Rudolf, "Similar pigmentation characteristics in the specific-locus and the mammalian spot test," <i>The Journal of Heredity</i> 76:421-426 (1985)
	✓	Favor, Jack, "Characterization of dominant cataract mutations in mice: penetrance, fertility and homozygous viability of mutations recovered after 250 mg/kg ethylnitrosourea paternal treatment," <i>Genet. Res., Camb.</i> 44:183-197 (1984)
	✓	Favor et al., "Towards an understanding of the nature and fitness of induced mutations in germ cells of mice: homozygous viability and heterozygous fitness effects of induced specific-locus, dominant cataract and enzyme-activity mutations," <i>Mutation Research</i> 212:67-75 (1989)
	✓	Favor et al., "The effect of dose fractionation on the frequency of ethylnitrosourea-induced dominant cataract and recessive specific locus mutations in germ cells of the mouse," <i>Mutation Research</i> 198:269-275 (1988)
		Favor et al., "The frequency of dominant cataract and recessive specific-locus mutations and mutation mosaics in F ₁ mice derived from post-spermatogonial treatment with ethylnitrosourea," <i>Mutation Research</i> 229:105-114 (1990)
		Generoso et al., "Mutagen-induced fetal anomalies and death following treatment of females within hours after mating," <i>Mutation Research</i> 199:175-181 (1988)
	✓	Giometti et al., "Detection of Heritable Mutations as Quantitative Changes in Protein Expression," <i>The Journal of Biological Chemistry</i> 262:12764-12767 (1987)
	✓	Giometti et al., "A Heritable Variant of Mouse Liver Ornithine Aminotransferase (EC2.6.1.13) Induced by Ethylnitrosourea," <i>The Journal of Biological Chemistry</i> 263:15781-15784 (1988)
	✓	Giometti et al., "Heritable protein variants induced by exposure to ethylnitrosourea: Heritability, subcellular location, and tissue distribution," <i>Mutation Research</i> 202:9-17 (1988)
	✓	Gould et al., "Action of <i>Min</i> and <i>Mom1</i> on Neoplasia in Ectopic Intestinal Grafts," <i>Cell Growth & Differentiation</i> 7:1361-1368 (1996)
	✓	Harte et al., "Genetic Analysis of Mutations at the <i>Glued</i> Locus and Interacting Loci in <i>Drosophila Melanogaster</i> ," <i>D. Melanogaster Gl Mutations</i> 477-501 (1982)
		Hayashi et al., "Difference between intraperitoneal and oral gavage application in the micronucleus test," <i>Mutation Research</i> 223:329-344 (1989)
	✓	Hitotsumachi et al., "Dose-repetition increases the mutagenic effectiveness of <i>N</i> -ethyl- <i>N</i> -nitrosourea in mouse spermatogonia," <i>Proc. Natl. Acad. Sci. USA</i> 82:6619-6621 (1985)
	✓	Holdener et al., "Phenotypic and physical analysis of a chemically induced mutation disrupting anterior axial development in the mouse," <i>Mammalian Genome</i> 6:474-475 (1995)
		Holdener et al., "Physical Localization of <i>eed</i> : A Region of Mouse Chromosome 7 Required for Gastrulation," <i>Genetics</i> 24:447-456 (1995)
		Huang et al., "Comparison of baseline sister-chromatid exchanges (SCE), cyclophosphamide-, ethylnitrosourea (ENU)-induced SCE, ENU-induced cell-cycle delay and chromosome aberrations between Peru and laboratory mice," <i>Mutations Research</i> 230:93-100 (1990)

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gk	✓	Johnson et al., "Molecular Analysis of 36 Mutations at the Mouse <i>pink-eyed dilution (p)</i> Locus," <i>Genetics</i> 141:1563-1571 (1995)
	✓	Johnson et al., "High resolution metrical analysis applied to the assessment of damage associated with induced mutations in the mouse," <i>Mutation Research</i> 229:141-159 (1990)
	✓	Justice et al., "Induction of new mutations in a mouse <i>t</i> -haplotype using ethylnitrosourea mutagenesis," <i>Genet. Res., Camb.</i> 47:187-192 (1986)
	✓	Kenyon, Cynthia, "The Nematode <i>Caenorhabditis elegans</i> ," <i>Science</i> 240:1448-1452 (1988)
	✓	Kerscher et al., "Two New Cataract Loci, <i>Ccw</i> and <i>To3</i> , and Further Mapping of the <i>Npp</i> and <i>Opj</i> Cataracts in the Mouse," <i>Genomics</i> 36:17-21 (1996)
	✓	King et al., "The Mouse <i>Clock</i> Mutation Behaves as an Antimorph and Maps Within the <i>W^{19H}</i> Deletion, Distal of <i>Kit</i> ," <i>Genetics</i> 146:1049-1060 (1997)
	✓	Klopp et al., "Three Murine Cataract Mutants (<i>Cat2</i>) Are Defective in Different γ -Crystallin Genes," <i>Genomics</i> 52:152-158 (1998)
	✓	Kratochvilova et al., "Dominant cataract and recessive specific-locus mutations detected in offspring of procarbazine-treated male mice," <i>Mutation Research</i> 88:298-301
	✓	Lewis et al., "ENU mutagenesis in the mouse electrophoretic specific-locus test-1. Dose-response relationship of electrophoretically-detected mutations arising from mouse spermatogonia treated with ethylnitrosourea," <i>Mutation Research</i> 249:311-315 (1991)
	✓	Lewis et al., "ENU mutagenesis in the mouse electrophoretic specific-locus test-2. Mutational studies of mature oocytes," <i>Mutation Research</i> 296:129-133 (1992)
		Martelli et al., "Comparison of micronucleus formation in mouse bone marrow and spleen," <i>Mutation Research</i> 292:63-67 (1993)
	✓	McDonald, J. David, "Using High-Efficiency Mouse Germline Mutagenesis to Investigate Complex Biological Phenomena: Genetic Diseases, Behavior, and Development," <i>High-Efficiency Mouse Germline Mutagenesis</i> 303-305 (1995)
	✓	McDonald et al., "Hyperphenylalaninemia in the <i>hph-1</i> Mouse Mutant," <i>Pediatric Research</i> 23:63-67 (1987)
	✓	McDonald et al., "Biochemical Defect of the <i>hph-1</i> Mouse Mutant Is a Deficiency in GTP-Cyclohydrolase Activity," <i>Journal of Neurochemistry</i> 50:655-657 (1987)
	✓	Miller et al., "Genetic Studies of the Mouse Mutations <i>mahogany</i> and <i>mahoganoid</i> ," <i>Genetics</i> 146:1407-1415 (1997)
	✓	Montagutelli et al., " <i>aku</i> , a Mutation of the Mouse Homologous to Human Alkaptonuria, maps to Chromosome 16," <i>Genomics</i> 19:9-11 (1994)
	✓	Moore et al., "The Murine Dilute Suppressor Gene <i>dsu</i> Suppresses the Coat-Color Phenotype of Three Pigment Mutations That Alter Melanocyte Morphology, <i>d</i> , <i>ash</i> and <i>ln</i> ," <i>Genetics</i> 119:933-941 (1988)
	✓	Morris, Suzanne M., "The genetic toxicology of 5-fluoropyrimidines and 5-chlorouracil," <i>Mutation Research</i> 297:39-51 (1993)

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✓	Preat, Thomas, "Characterization of Suppressor of fused, a Complete Suppressor of the fused Segment Polarity Gene of <i>Drosophila melanogaster</i> ," <i>Genetics</i> 132:725-736 (1992)
✓	Provost et al., "Response to the Commentary Article: Comparison of mutation frequencies obtained using transgenes and the specific-locus mutation system in male mouse-germ cells," <i>Mutation Research</i> 298:145-147 (1992)
✓	Provost et al., "Transgenic systems for in vivo mutation analysis," <i>Mutation Research</i> 288:133-149 (1993)
✓	Rinchik et al., "A strategy for fine-structure functional analysis of a 6- to 11-centimorgan region of mouse chromosome 7 by high-efficiency mutagenesis," <i>Proc. Natl. Acad. Sci. USA</i> 87:896-900 (1990)
✓	Rinchik, Eugene M., "Chemical mutagenesis and fine-structure functional analysis of the mouse genome," <i>TIG</i> 7:15-21 (1991)
✓	Rinchik et al., "Deletion Mapping of Four Loci Defined by <i>N</i> -Ethyl- <i>N</i> -Nitrosourea-Induced Postimplantation-lethal Mutations Within the <i>pid-Hbb</i> Region of Mouse Chromosome 7," <i>Genetics</i> 135:1117-1123 (1993)
✓	Rinchik et al., "Molecular Analysis of Radiation-induced <i>albino</i> (<i>c</i>)-Locus Mutations That Cause Death at Preimplantation Stages of Development," <i>Genetics</i> 135:1107-1116 (1993)
✓	Rinchik et al., "Molecular Genetics of the <i>Brown</i> (<i>b</i>)-Locus Region of Mouse Chromosome 4. I. Origin and Molecular Mapping of Radiation- and Chemical-Induced Lethal <i>Brown</i> Deletions," <i>Genetics</i> 137:845-854 (1994)
✓	Rinchik, Eugene M., "Molecular Genetics of the <i>Brown</i> (<i>b</i>)-Locus Region of Mouse Chromosome 4. II. Complementation Analyses of Lethal <i>Brown</i> Deletions," <i>Genetics</i> 137:855-856 (1994)
✓	Rubin, Gerald M., " <i>Drosophila melanogaster</i> as an Experimental Organism," <i>Science</i> 24:1453-1459 (1988)
✓	Ruddle et al., "Hybrid Cells and Human Genes," <i>Genetic Analysis</i> 122-157 (1974)
✓	Russell et al., "The Mouse Specific-Locus Test with Agents Other Than Radiations, Interpretation of Data and Recommendations for Further Work," <i>Mutation Research</i> 86:329-354 (1981)
✓	Russell et al., "The paternal genome in mouse zygotes is less sensitive to ENU mutagenesis than the maternal genome," <i>Mutation Research</i> 248:203-209 (1991)
✓	Russell et al., "Frequency and nature of specific-locus mutations induced in female mice by radiations and chemicals: a review," <i>Mutation Research</i> 296:107-127 (1992)
✓	Russell et al., "Structural differences between specific-locus mutations induced by different exposure regimes in mouse spermatogonial stem cells," <i>Mutation Research</i> 288:187-195 (1993)
✓	Russell et al., "Dose-response curve for ethylnitrosourea-induced specific-locus mutations in mouse spermatogonia," <i>Proc. Natl. Acad. Sci. USA</i> 79:3589-3591 (1982)
✓	Sandulache et al., "Genetic Instability at the <i>agouti</i> Locus of the Mouse (<i>Mus musculus</i>). I. Increased Reverse Mutation Frequency to the <i>A</i> Allele in <i>A/a</i> Heterozygotes," <i>Genetics</i> 137:1079-1087 (1994)
✓	Searle et al., "Mouse homologues of human hereditary disease," <i>J. Med. Genet.</i> 31:1-19 (1994)

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jk		Shedlovsky et al., "Saturation germ line mutagenesis of the murine <i>t</i> region including a lethal allele at the quaking locus," <i>Proc. Natl. Acad. Sci. USA</i> 85:180-184 (1988)	
		Shedlovsky et al., "Mouse Models of Human Phenylketonuria," <i>Genetics</i> 134:1205-1210 (1993)	
		Shoemaker et al., "Studies of neoplasia in the Min mouse," <i>Biochimica et Biophysica Acta</i> 1332:F25-F48 (1997)	
		Simon et al., "Ras1 and a Putative Guanine Nucleotide Exchange Factor Perform Crucial Steps in Signaling by the Sevenless Protein Tyrosine Kinase," <i>Cell</i> 67:701-716 (1991)	
		Suzuki et al., "The concomitant detection of gene mutation and micronucleus induction by mitomycin C in vivo using <i>lacZ</i> transgenic mice," <i>Mutation Research</i> 285:219-224 (1993)	
		Takahashi et al., "Forward and Reverse Genetic Approaches to Behavior in the Mouse," <i>Science</i> 264:1724-1732 (1994)	
		van Zeeland et al., "DNA adduct formation in mouse testis by ethylating agents: a comparison with germ-cell mutagenesis," <i>Mutation Research</i> 231:55-62 (1990)	
		Vitaterna et al., "Mutagenesis and Mapping of a Mouse Gene, <i>Clock</i> , Essential for Circadian Behavior," <i>Science</i> 264:719-725 (1994)	
		Wang et al., "Coat Color Genetics of <i>Peromyscus</i> : II. Tan Streak-A New recessive Mutation in the Deer Mouse, <i>P. maniculatus</i> ," <i>The Journal of Heredity</i> 84: 305-307 (1993)	
		Yamamoto et al., "Dose-dependent Induction of Both Pepsinogen-altered Pyloric Glands and Adenocarcinomas in the glandular Stomach of C3H Mice Treated with <i>N</i> -Methyl- <i>N</i> -nitrosourea," <i>Cancer Res.</i> 58:238-244 (1997)	
		Yamasaki et al., "Mutational activation of <i>H-ras</i> oncogene transformability by alkylnitrosourea-induced DNA damage," <i>Mutation Research</i> 266:241-252 (1992)	

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